



DEPARTMENT OF ENERGY

Federal Energy Regulatory Commission

[Docket No. RD22-5-000]

Before Commissioners: Richard Glick, Chairman;
James P. Danly, Allison Clements,
Mark C. Christie, and Willie L. Phillips;

North American Electric Reliability Corporation; Order Approving Reliability Standards
FAC-001-4 And FAC-002-4

1. On June 14, 2022, the North American Electric Reliability Corporation (NERC), the Commission-certified Electric Reliability Organization (ERO), submitted a petition seeking approval of proposed Reliability Standards FAC-001-4 (Facility Interconnection Requirements) and FAC-002-4 (Facility Interconnection Studies) (collectively, the FAC Reliability Standards).¹ As discussed in this order, pursuant to section 215(d)(2) of the Federal Power Act (FPA), we approve the FAC Reliability Standards, their associated violation risk factors and violation severity levels, the proposed implementation plan, and the retirement of the currently effective versions of the FAC Reliability Standards immediately prior to the effective date of the revised FAC Reliability Standards.² As discussed in this order, we determine that the FAC Reliability Standards improve upon the currently effective Reliability Standards FAC-001-3 and FAC-002-3 by ensuring that changes to existing interconnected Facilities that have reliability impacts are properly addressed in interconnection requirements and studies.

I. Background

A. Section 215 and Mandatory Reliability Standards

2. Section 215 of the FPA provides that the Commission may certify an ERO, the purpose of which is to develop mandatory and enforceable Reliability Standards, subject to Commission review and approval.³ Pursuant to section 215 of the FPA, the

¹ The proposed Reliability Standards are not attached to this order. The proposed Reliability Standards are available on the Commission's eLibrary document retrieval system in Docket No. RD22-5-000 and on the NERC website, www.nerc.com.

² 16 U.S.C. 824o(d)(2).

³ 16 U.S.C. 824o.

Commission established a process to select and certify an ERO,⁴ and subsequently certified NERC.⁵

B. NERC Petition and Proposed FAC Reliability Standards

3. On June 14, 2022, NERC submitted a petition seeking approval of the FAC Reliability Standards. NERC also requested that the Commission approve the associated violation risk factors and violation severity levels, the proposed implementation plan, and the retirement of the currently effective versions of the FAC Reliability Standards immediately prior to the effective date of the revised FAC Reliability Standards.

4. NERC explains that the proposed modifications to the FAC Reliability Standards stem from recommendations in the NERC Inverter-Based Resource Performance Task Force's⁶ (IRPTF) March 2020 white paper.⁷ Consistent with the IRPTF's recommendations, NERC proposes to modify the FAC Reliability Standards in two ways. First, NERC proposes to replace the term "materially modifying," which is used in Commission's interconnection process,⁸ and replace it with the term "qualified change." According to NERC, the IRPTF noted in its white paper that confusion between the Commission-defined term "Material Modification" in the *pro forma* interconnection procedures and agreements and the undefined term "materially modify" in the standards "could result in Facility changes that are potentially significant for reliability not being

⁴ *Rules Concerning Certification of the Elec. Reliability Org.; & Procedures for the Establishment, Approval, & Enforcement of Elec. Reliability Standards*, Order No. 672, 114 FERC ¶ 61,104, *order on reh'g*, Order No. 672-A, 114 FERC ¶ 61,328 (2006).

⁵ *N. Am. Elec. Reliability Corp.*, 116 FERC ¶ 61,062, *order on reh'g and compliance*, 117 FERC ¶ 61,126 (2006), *order on compliance*, 118 FERC ¶ 61,030, *order on clarification and reh'g*, 119 FERC ¶ 61,046 (2007), *aff'd sub nom. Alcoa Inc. v. FERC*, 564 F.3d 1342 (D.C. Cir. 2009).

⁶ NERC states that the IRPTF was created after several grid disturbances involving inverter-based resources. As part of its work, the IRPTF completed a comprehensive review of NERC's Reliability Standards to determine areas where the current standards were not sufficient to address the increase in inverter-based resources on the Bulk-Power System. *See* NERC Petition at 9-10.

⁷ NERC IRPTF, *IRPTF Review of NERC Reliability Standards* (Mar. 2020), (IRPTF White Paper), https://www.nerc.com/comm/PC/InverterBased%20Resource%20Performance%20Task%20Force%20IRPT/Review_of_NERC_Reliability_Standards_White_Paper.pdf.

⁸ IRPTF White Paper at 1 (referring to the term "Material Modification," which is defined in the Commission's *pro forma* generator interconnection procedures and agreements as those modifications that have a material impact on the cost or timing of any interconnection request with a later queue priority date. *See, e.g., pro forma Large Generator Interconnection Agreement*, Art. 1, Definitions).

studied under the FAC standards because the changes would not have a ‘material impact’ on other generators in the interconnection queue.”⁹ This is because, as used in the Commission’s *pro forma* interconnection procedures and agreements, Material Modifications only refer to changes that have a “material impact” on other generators in the interconnection queue, whereas in the FAC Reliability Standards, the undefined term “materially modify” was used to refer to any change that could have reliability impacts on the system. Thus, NERC states that the term “qualified change” would refer to “changes to existing interconnected Facilities that can have reliability impacts” and would ensure that they are “properly addressed in interconnection requirements and studies.”¹⁰

5. Second, NERC explains that the proposed FAC Reliability Standards identify the planning coordinator as the entity responsible for developing a uniform definition of “qualified change” that describes the changes to interconnected Facilities that must be addressed in interconnection requirements and studies under the FAC Reliability Standards. NERC states that planning coordinators “are encouraged to coordinate with other entities in developing their definitions.”¹¹ Once the planning coordinator defines what is a qualified change within its footprint, it must “maintain a publicly available definition of qualified change for the purposes of facility interconnection.”¹² Finally, the proposed FAC Reliability Standards require applicable entities within that planning coordinator’s area to include procedures for coordinating impacts of qualified changes in their interconnection requirements and require entities seeking to make qualified changes to adhere to the definition in their interconnection procedures and studies.¹³

6. NERC proposes an implementation plan for the proposed FAC Reliability Standards. The proposed implementation plan provides that the proposed FAC Reliability Standards would become effective on the first day of the first calendar quarter that is 12 months after applicable regulatory approval and that the currently effective versions of the standards would be retired immediately prior to the effective date of the revised FAC Reliability Standards.¹⁴ Further, the proposed implementation plan provides that, where the planning coordinator’s definition of “qualified change” differs from what an applicable entity may have considered a “materially modifying” change in Facility interconnection requirements or studies under the current standards, those entities will have an additional 12 months from the effective date to come into compliance with the revised standards. NERC explains that this implementation timeline reflects consideration that planning coordinators will need a reasonable period of time to develop

⁹ *Id.* at 11.

¹⁰ NERC Petition at 8.

¹¹ *Id.* at 16.

¹² *Id.* at 12.

¹³ *Id.*

¹⁴ *Id.*, Ex. B at 2-3.

a definition of “qualified change” for their respective areas under proposed Reliability Standard FAC-002-4 Requirement R6 and to make that definition publicly available.¹⁵ NERC asserts that the proposed implementation plan provides a reasonable period of time for entities to comply, considering the process required for the new requirements, and thus strikes an appropriate balance with the urgency to implement the proposed FAC Reliability Standards.¹⁶

7. Finally, NERC proposes modifications to the associated violation risk factors and violation severity levels for these FAC Reliability Standards. The changes are mostly clarifications in the violation severity levels to match changes in Requirement language. One new violation risk factor and violation severity level assignment was added for new Requirement R6 in FAC-002-4.¹⁷

II. Notice of Filing and Responsive Pleadings

8. Notice of NERC’s June 14, 2022, petition was published in the *Federal Register*, 87 FR 62,401 (Oct. 14, 2022), with interventions and protests due on or before October 28, 2022. None was filed.

III. Determination

9. Pursuant to section 215(d)(2) of the FPA, we approve the FAC Reliability Standards as just, reasonable, not unduly discriminatory or preferential and in the public interest. We conclude that the proposed FAC Reliability Standards are an improvement over the currently effective Reliability Standards FAC-001-3 and FAC-002-3 and will improve Bulk-Power System reliability by helping to ensure that changes to existing interconnected facilities that have reliability impacts are properly addressed in interconnection requirements and studies. We find that proposed Reliability Standard FAC-002-4 Requirement R6 will avoid potential disputes over changes to facilities that require additional study by authorizing the planning coordinator to define the term “qualified change” and requiring public posting of the definition. Replacing “materially modify” with “qualified change” also removes the possibility of confusion with the Commission’s defined term “Material Modification” in its *pro forma* interconnection procedures and agreements.

10. We also approve the proposed implementation plan. The implementation plan provides that the proposed FAC Reliability Standards would become effective on the first day of the first calendar quarter that is 12 months after applicable regulatory approval and an additional 12 months under certain circumstances. We find that the proposed implementation plan provides a reasonable period of time for entities to comply with the

¹⁵ *Id.* at 19.

¹⁶ *Id.* at 20.

¹⁷ *Id.* at Ex. E.

new requirements and strikes an appropriate balance with the urgency to implement the proposed FAC Reliability Standards.

11. Finally, we approve NERC's proposed clarifying revisions to the existing violation risk factor and violation severity level assignments for these FAC Reliability Standards, as well as the new violation risk factor and violation severity level assignment to Requirement R6 in FAC-002-4.

IV. Information Collection Statement

12. In compliance with the requirements of the Paperwork Reduction Act of 1995, 44 U.S.C. § 3506(c)(2)(A), the Commission is soliciting public comment on FAC Reliability Standards; and the new collection FERC-725D(1),¹⁸ which will be submitted to the Office of Management and Budget (OMB) for a review of the information collection requirements. Comments on the collection of information are due to OMB within 60 days of the date this order is published in the Federal Register. Respondents subject to the filing requirements of this order will not be penalized for failing to respond to these collections of information unless the collections of information display a valid OMB control number.

13. The information collection requirements are subject to review by the OMB under the Paperwork Reduction Act at 44 U.S.C. 3507(d). OMB's regulations at CFR 1320.11 require approval of certain information collection requirements imposed by agency rules.¹⁹ The Commission solicits comments on the Commission's need for this information, whether the information will have practical utility, the accuracy of the burden estimates, ways to enhance the quality, utility, and clarity of the information to be collected or retained, and any suggested methods for minimizing respondents' burden, including the use of automated information techniques. Specifically, the Commission asks that any revised burden or cost estimates submitted by commenters be supported by sufficient detail to understand how the estimates are generated.

14. Please send comments concerning the collection of information and the associated burden estimates to OMB through www.reginfo.gov/public/do/PRAMain, Attention: Federal Energy Regulatory Commission Desk Officer. Please identify the OMB Control Number 1902-NEW in the subject line.

15. Please submit copies of your comments (identified by Docket No. RD22-5-000) to the Commission as noted below. Electronic filing through <http://www.ferc.gov> is preferred.

Electronic Filing: Documents must be filed in acceptable native applications and print-to-PDF, but not in scanned or picture format.

¹⁸ FERC-725D(1) is a temporary placeholder number to avoid conflicting with the pending request already submitted to OMB regarding FERC-725D.

¹⁹ 5 CFR 1320 (2021).

For those unable to file electronically, comments may be filed by USPS mail or by hand (including courier) delivery.

- a. Mail via U.S. Postal Service Only: Addressed to: Federal Energy Regulatory Commission, Secretary of the Commission, 888 First Street, N.E., Washington, DC 20426.
- b. Hand (including courier) delivery: Deliver to: Federal Energy Regulatory Commission, 12225 Wilkins Avenue, Rockville, MD 20852.

16. *Instructions:* OMB submissions must be formatted and filed in accordance with submission guidelines at: www.reginfo.gov/public/do/PRAMain; using the search function under the “Currently Under Review field,” select Federal Energy Regulatory Commission, click “submit,” and select “comment” to the right of the subject collection.

17. *Title:* FERC-725D1, RD22-5-000, Mandatory Reliability Standards FAC-001-4 and FAC-002-4.

18. OMB Control No.: 1902-NEW.

19. *Respondents:* Transmission owners, generator owners, and planning coordinators.²⁰

20. *Frequency of Information Collection:* Once during years 1 and 2. On occasion during year 3 and beyond.

21. *Abstract:* The Facility Design, Connections, and Maintenance Reliability Standards address topics such as facility interconnection requirements, facility ratings, system operating limits, and transfer capabilities. At present, Reliability Standard FAC-001-003 requires Transmission Owners and applicable Generator Owners to complete coordinated studies for new or “materially modified” existing interconnections. Reliability Standard FAC-001-4 revises that requirement by applying it to “qualified changes” instead of “materially modified” interconnections. This revision is intended to prevent confusion with the Commission-defined term “Material Modification” in the *pro forma* interconnection procedures and agreements. In this order, the Commission determines that in some cases, a consequence of this confusion may be that reliability inappropriately is not being studied under the FAC standards. The term “qualified change” would refer to changes to existing interconnected facilities that can have reliability impacts and would help ensure that they are properly addressed in interconnection requirements and studies. The order also would revise Requirement R6 of existing Reliability Standard FAC-002-3 by authorizing the planning coordinator to

²⁰ The NERC Glossary, at https://www.nerc.com/pa/Stand/Glossary%20of%20Terms/Glossary_of_Terms.pdf, defines these terms. A Transmission Owner is the entity that owns and maintains transmission facilities. A Generator Owner is the entity that owns and maintains generating units. A Planning Coordinator (formerly known as a Planning Authority) is the responsible entity that coordinates and integrates transmission facilities, service plans, resource plans, and protection systems.

define the term “qualified change” and requiring public posting of the definition. The implementation of Reliability Standards FAC-001-4 and FAC-002-4 will ensure that there is appropriate coordination and communication regarding the interconnection of facilities.

22. *Necessity of Information:* Mandatory.

23. *Internal Review:* The Commission has reviewed the changes and has determined that the described information collection activities are necessary. These requirements conform to the Commission’s need for efficient information collection, communication, and management within the energy industry. The Commission has specific, objective support for the burden estimates associated with the information collection requirements.

24. Respondents have already provided information under 725D. The proposed new collection FERC-725D1 would result in a minor additional burden to planning coordinators, due to the requirement that they develop the definition of “qualified change” for new and existing interconnections of generation, transmission or electricity end user facilities. This burden would be expected to be greater in years one and two than in year three and beyond for FAC-002-4. No change in burden is estimated for applicable entities for FAC-001-4 as their responsibilities will remain the same.

25. The number of respondents below is based on an estimate of the NERC compliance registry for planning coordinators (63). The Commission based its paperwork burden estimates on the NERC compliance registry as of September 16, 2022.

Public Reporting Burden: The burden and cost estimates below are based on the increase in the reporting and recordkeeping burden imposed by the proposed Reliability Standards. Our estimates are based on the NERC Compliance Registry as of September 16, 2022, which indicates the affected entities for FAC-001-2/ FAC-002-2 expected to have a change in burden, i.e., planning coordinators (63).

Proposed Information Collection Activities Due to Docket No. RD22-5					
Reliability Standard FAC-002-4	Type²¹ and Number of Entity (1)	Number of Annual Responses Per Entity (2)	Total Number of Responses (1) *(2) = (3)	Average Number of Burden Hours per Response (4) ²²	Total Burden Hours (3) *(4) = (5)

²¹ PA/PC=Planning Coordinator. Note that Planning Coordinator (PC) is the new name for Planning Authority – a term still used in NERC’s Compliance Registry.

²² For purpose of estimate the majority of the work on the “qualified change” definition for the PA/PC will be done by

- Electrical engineer (OC 17-2071) \$77.02

One Time Estimate Years 1 and 2					
FAC-002-4	PA/PC (63)	1	63	120 hrs.; \$7,200	7,560 hrs.; \$453,600
Ongoing Estimate Year 3 ongoing					
FAC-002-4	PA/PC (63)	1	63	40 hrs.; \$2,520	2,520 hrs.; \$158,760

V. Document Availability

26. In addition to publishing the full text of this document in the Federal Register, the Commission provides all interested persons an opportunity to view and/or print the contents of this document via the Internet through the Commission's Home Page (<http://www.ferc.gov>) and in the Commission's Public Reference Room during normal business hours (8:30 a.m. to 5:00 p.m. Eastern time) at 888 First Street, NE, Room 2A, Washington, DC 20426.

27. From the Commission's Home Page on the Internet, this information is available on eLibrary. The full text of this document is available on eLibrary in PDF and Microsoft Word format for viewing, printing, and/or downloading. To access this document in eLibrary, type the docket number excluding the last three digits of this document in the docket number field.

28. User assistance is available for eLibrary and the Commission's website during normal business hours from the Commission's Online Support at (202) 502-6652 (toll free at 1-866-208-3676) or email at ferconlinesupport@ferc.gov, or the Public Reference Room at (202) 502-8371, TTY (202) 502-8659. E-mail the Public Reference Room at public.referenceroom@ferc.gov.

The Commission orders:

The Commission hereby approves Reliability Standards FAC-001-4 and FAC-002-4, their associated violation risk factors and violation severity levels, implementation plan, and the retirement of the currently effective Reliability Standards FAC-001-3 and FAC-002-3 immediately prior to the effective date of the revised Reliability Standards, as discussed in the body of this order.

By the Commission.

Issued: November 17, 2022.

- Information/Record clerks (OC 43-4199) \$42.35

The average hourly burden for this collection is \$59.69 $[(\$77.02 + \$42.35)/2 = \$59.69]$ and is rounded to \$60.00 an hour.

Debbie-Anne A. Reese,
Deputy Secretary.

[FR Doc. 2022-25588 Filed: 11/22/2022 8:45 am; Publication Date: 11/23/2022]